

Table XII-1  
 LARYNX CANCER (Invasive)

TRENDS IN SEER INCIDENCE<sup>a</sup> AND U.S. MORTALITY<sup>b</sup> USING THE JOINPOINT REGRESSION PROGRAM, 1975-2000  
 WITH UP TO THREE JOINPOINTS BY RACE AND SEX

		<u>Joinpoint Segment 1</u>		<u>Joinpoint Segment 2</u>		<u>Joinpoint Segment 3</u>		<u>Joinpoint Segment 4</u>	
		Year	APC	Year	APC	Year	APC	Year	APC
<u>SEER Cancer Incidence<sup>a</sup></u>									
All Races	Male and Female	1975-1988	0.0	1988-2000	-2.4 <sup>c</sup>				
All Races	Male	1975-1988	-0.3	1988-2000	-2.7 <sup>c</sup>				
All Races	Female	1975-1988	1.8 <sup>c</sup>	1988-2000	-1.6 <sup>c</sup>				
White	Male and Female	1975-1988	0.0	1988-2000	-2.4 <sup>c</sup>				
White	Male	1975-1985	0.2	1985-2000	-2.5 <sup>c</sup>				
White	Female	1975-1989	1.5 <sup>c</sup>	1989-2000	-1.8 <sup>c</sup>				
Black	Male and Female	1975-1990	1.2	1990-2000	-2.8 <sup>c</sup>				
Black	Male	1975-1990	1.0	1990-2000	-3.0 <sup>c</sup>				
Black	Female	1975-2000	1.0						
<u>U.S. Cancer Mortality<sup>b</sup></u>									
All Races	Male and Female	1975-1993	-0.4 <sup>c</sup>	1993-2000	-1.9 <sup>c</sup>				
All Races	Male	1975-1993	-0.8 <sup>c</sup>	1993-2000	-2.3 <sup>c</sup>				
All Races	Female	1975-1992	1.5 <sup>c</sup>	1992-2000	-1.5 <sup>c</sup>				
White	Male and Female	1975-1993	-0.7 <sup>c</sup>	1993-2000	-1.6 <sup>c</sup>				
White	Male	1975-1993	-1.1 <sup>c</sup>	1993-2000	-2.1 <sup>c</sup>				
White	Female	1975-1992	1.3 <sup>c</sup>	1992-2000	-1.2				
Black	Male and Female	1975-1993	1.2 <sup>c</sup>	1993-2000	-2.8 <sup>c</sup>				
Black	Male	1975-1993	1.3 <sup>c</sup>	1993-2000	-2.9 <sup>c</sup>				
Black	Female	1975-1992	2.4 <sup>c</sup>	1992-2000	-2.3				

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 U.S. standard population by 5-year age groups using the Joinpoint Regression Program.

<sup>a</sup> Trends are from the SEER 9 areas.

<sup>b</sup> Trends are from the NCHS public use data file.

<sup>c</sup> The APC is significantly different from zero (p<.05).

Table XII-2  
LARYNX CANCER (Invasive)

SEER INCIDENCE RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>a</sup>, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1975	5.0	9.5	1.5	5.0	9.4	1.5	7.0	13.2	-
1976	5.2	10.0	1.4	5.2	9.9	1.4	7.3	14.6	-
1977	5.0	9.7	1.4	5.0	9.7	1.3	7.5	13.9	-
1978	5.3	9.8	1.8	5.3	9.8	1.9	6.9	13.2	-
1979	5.4	10.1	1.7	5.4	10.2	1.7	7.5	13.2	-
1980	5.2	10.0	1.6	5.2	9.9	1.5	7.3	14.3	-
1981	5.4	9.8	1.9	5.3	9.6	2.0	8.1	16.3	-
1982	5.3	9.8	1.8	5.3	9.8	1.8	7.9	14.4	-
1983	5.3	9.9	1.7	5.4	10.1	1.7	6.8	12.2	-
1984	5.1	9.6	1.6	5.0	9.6	1.5	8.5	14.9	3.4
1985	5.4	9.9	1.9	5.4	10.0	1.9	8.4	15.5	3.2
1986	5.0	9.4	1.6	4.9	9.2	1.7	7.8	15.5	-
1987	5.2	9.4	1.9	5.1	9.4	1.9	8.2	15.0	3.1
1988	5.2	9.6	1.9	5.2	9.6	1.8	8.2	14.8	3.3
1989	5.0	8.9	2.0	5.0	8.9	1.9	7.9	14.3	3.3
1990	5.1	9.2	1.9	5.0	9.0	1.9	9.5	17.8	3.6
1991	4.7	8.5	1.8	4.8	8.5	1.9	6.7	12.6	-
1992	5.0	9.1	1.8	4.9	8.9	1.7	8.7	15.8	3.4
1993	4.4	8.1	1.5	4.4	8.0	1.5	6.9	14.1	-
1994	4.7	8.3	1.8	4.5	8.1	1.7	8.9	15.8	3.8
1995	4.4	7.9	1.6	4.4	7.8	1.6	6.7	13.0	-
1996	4.3	7.5	1.7	4.3	7.5	1.6	6.4	11.4	2.8
1997	4.2	7.5	1.6	4.1	7.3	1.6	7.1	13.2	2.7
1998	3.8	6.7	1.6	3.7	6.5	1.6	6.5	11.8	2.8
1999	4.1	7.0	1.8	4.1	6.9	1.8	7.2	12.3	3.6
2000	4.0	7.2	1.4	4.0	7.0	1.5	6.1	11.6	2.2
<u>AGE-ADJUSTED RATES, 1996-2000</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	4.1	7.2	1.6	4.0	7.1	1.6	6.7	12.1	2.8
Under 65	2.2	3.4	0.9	2.1	3.3	0.9	4.0	6.5	1.9
65 and over	17.5	33.0	6.4	17.4	32.7	6.5	25.3	50.6	9.2
All ages (world std.) <sup>b</sup>	3.0	5.0	1.2	2.9	4.9	1.2	5.0	8.6	2.2
<u>AGE-SPECIFIC RATES, 1996-2000</u>									
<u>AGE AT DIAGNOSIS:</u>									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	0.5	0.6	-	0.5	0.6	-	-	-	-
40-44	1.5	2.2	0.9	1.4	1.9	0.9	3.2	5.0	-
45-49	2.9	4.4	1.4	2.6	4.0	1.2	6.8	10.3	-
50-54	6.3	10.2	2.5	6.0	9.7	2.3	12.0	19.9	-
55-59	10.2	16.8	3.9	9.9	16.4	3.6	19.2	32.5	-
60-64	15.8	25.7	6.7	16.0	25.8	6.7	25.8	43.1	11.9
65-69	19.4	33.2	7.6	19.4	33.0	7.5	30.3	53.2	13.0
70-74	21.1	39.0	7.2	21.3	38.9	7.4	29.7	57.9	-
75-79	17.2	33.1	6.0	16.9	32.3	6.1	26.3	55.3	-
80-84	14.2	29.6	5.1	14.4	29.7	5.4	18.8	-	-
85+	9.8	24.3	3.8	9.5	23.7	3.9	-	-	-

<sup>a</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>b</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XII-3  
LARYNX CANCER (Invasive)

U.S. DEATH RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>a</sup>, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DEATH:</u>									
1975	1.7	3.3	0.5	1.6	3.2	0.4	2.6	5.0	0.8
1976	1.7	3.4	0.5	1.6	3.3	0.5	2.6	5.1	0.7
1977	1.7	3.4	0.5	1.6	3.3	0.4	2.7	5.5	0.7
1978	1.7	3.4	0.5	1.6	3.2	0.5	2.9	5.9	0.7
1979	1.7	3.3	0.5	1.6	3.2	0.4	2.6	5.2	0.6
1980	1.6	3.2	0.5	1.5	3.0	0.4	2.9	5.7	0.9
1981	1.7	3.3	0.5	1.5	3.1	0.5	3.0	5.6	1.1
1982	1.7	3.2	0.5	1.6	3.0	0.5	2.8	5.5	0.8
1983	1.6	3.2	0.5	1.5	3.0	0.5	2.7	5.3	0.9
1984	1.6	3.2	0.5	1.5	2.9	0.5	3.0	6.2	0.7
1985	1.6	3.0	0.5	1.4	2.8	0.5	3.0	5.8	0.9
1986	1.6	3.1	0.5	1.5	2.8	0.5	3.1	6.1	1.0
1987	1.6	3.1	0.5	1.5	2.9	0.5	2.9	5.9	0.9
1988	1.6	3.0	0.5	1.4	2.7	0.5	3.2	6.7	0.8
1989	1.6	3.0	0.6	1.4	2.7	0.6	3.2	6.6	0.8
1990	1.6	3.0	0.5	1.4	2.7	0.5	3.0	5.8	1.1
1991	1.7	3.1	0.6	1.5	2.8	0.6	3.3	6.4	1.2
1992	1.6	3.0	0.6	1.5	2.7	0.6	3.3	6.4	1.1
1993	1.6	3.0	0.6	1.5	2.7	0.5	3.2	6.4	1.1
1994	1.6	2.9	0.6	1.4	2.6	0.5	3.2	6.4	1.0
1995	1.5	2.8	0.5	1.4	2.6	0.5	3.0	6.0	1.0
1996	1.5	2.8	0.6	1.4	2.5	0.5	3.2	6.3	1.0
1997	1.4	2.7	0.5	1.3	2.4	0.5	3.0	6.1	0.9
1998	1.4	2.6	0.6	1.3	2.3	0.5	2.8	5.6	0.9
1999	1.4	2.5	0.5	1.3	2.3	0.5	2.6	5.1	0.9
2000	1.4	2.6	0.5	1.3	2.3	0.5	2.8	5.5	1.0
<u>AGE-ADJUSTED RATES, 1996-2000</u>									
<u>AGE AT DEATH:</u>									
All ages	1.4	2.6	0.5	1.3	2.4	0.5	2.9	5.7	0.9
Under 65	0.6	1.0	0.2	0.5	0.9	0.2	1.6	2.9	0.5
65 and over	7.0	13.5	2.8	6.7	12.8	2.7	11.9	25.0	4.0
All ages (world std.) <sup>b</sup>	1.0	1.7	0.4	0.9	1.5	0.3	2.1	4.0	0.7
<u>AGE-SPECIFIC RATES, 1996-2000</u>									
<u>AGE AT DEATH:</u>									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	0.1	0.1	-	0.1	0.1	-	0.2	-	-
40-44	0.3	0.4	0.1	0.2	0.3	0.1	0.7	1.3	-
45-49	0.8	1.3	0.3	0.6	1.0	0.2	2.5	4.3	0.9
50-54	1.6	2.8	0.6	1.4	2.3	0.5	4.3	7.8	1.3
55-59	3.2	5.5	1.1	2.7	4.6	1.0	8.2	15.8	2.1
60-64	5.0	8.5	1.9	4.4	7.4	1.8	11.4	21.8	3.3
65-69	6.2	10.6	2.6	5.8	9.7	2.4	12.2	21.8	5.0
70-74	7.3	12.9	2.9	6.8	11.9	2.8	14.1	28.6	4.5
75-79	7.6	14.2	3.1	7.3	13.4	3.1	12.3	26.3	3.8
80-84	7.7	16.0	2.8	7.5	15.6	2.9	10.5	25.6	3.1
85+	6.5	17.5	2.1	6.4	17.2	2.2	7.6	22.1	-

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>b</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XII-4  
LARYNX CANCER (Invasive)

## SURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR, STAGE AND AGE

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>5-YR RELATIVE SURVIVAL RATES</u>									
YEAR OF DIAGNOSIS:									
1960-1963 <sup>a</sup>	-	-	-	53	54	46	-	-	-
1970-1973 <sup>a</sup>	-	-	-	62	63	56	-	-	-
1974-1976 <sup>b</sup>	65.7	65.4	67.2	66.4	66.1	67.9	59.9	59.1	64.0 <sup>d</sup>
1977-1979 <sup>b</sup>	67.0	67.8	62.9	68.2	69.3	62.7	55.8	54.0	63.0 <sup>d</sup>
1980-1982 <sup>b</sup>	68.1	68.0	68.5	69.3	69.0	70.4	58.3	59.7	50.6 <sup>d</sup>
1983-1985 <sup>b</sup>	67.1	68.3	61.7	68.6	69.6	63.5	55.3	56.5	51.3 <sup>d</sup>
1986-1988 <sup>b</sup>	66.7	67.4	64.2	68.7	69.8	64.4	53.9	52.0	61.5 <sup>d</sup>
1989-1991 <sup>b</sup>	65.5	66.7	61.1	66.6	67.9	62.0	55.8	55.9	55.2 <sup>d</sup>
1992-1999 <sup>b</sup>	64.7	66.4	58.8 <sup>c</sup>	66.6	68.3	60.3 <sup>c</sup>	52.7	54.1	48.3
1992-1999 <sup>b</sup>									
ALL STAGES	64.7	66.4	58.8	66.6	68.3	60.3	52.7	54.1	48.3
LOCALIZED	82.6	84.4	75.0	83.7	85.8	75.2	72.2	73.4	67.9 <sup>d</sup>
REGIONAL	47.9	48.5	46.2	49.5	50.2	47.2	40.0	40.6	38.1 <sup>d</sup>
DISTANT	20.0	20.1	18.3 <sup>d</sup>	17.4	17.8	13.8 <sup>d</sup>	30.3 <sup>d</sup>	29.4 <sup>d</sup>	-
UNSTAGED	54.0	55.4	50.3 <sup>d</sup>	57.5	58.1	55.7 <sup>d</sup>	34.0 <sup>d</sup>	-	-
<u>STAGE DISTRIBUTION (%) 1992-1999<sup>b</sup></u>									
ALL STAGES									
Number of cases	6,746	5,359	1,387	5,524	4,403	1,121	955	734	221
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	51	52	46	52	53	48	41	43	36
REGIONAL	41	40	45	40	39	43	50	49	52
DISTANT	4	4	3	4	4	3	5	5	6
UNSTAGED	4	4	6	5	4	6	4	3	6
<u>5-YR RELATIVE SURVIVAL RATES, 1992-1999<sup>b</sup></u>									
AGE AT DIAGNOSIS:									
<45	65.2	63.9	68.5 <sup>d</sup>	69.7	69.5	70.2 <sup>d</sup>	52.3 <sup>d</sup>	49.3 <sup>d</sup>	-
45-54	64.5	65.7	58.6	68.5	69.6	62.5	48.5	49.7	45.0 <sup>d</sup>
55-64	66.7	67.4	63.9	68.0	68.7	65.4	58.2	59.0	55.9 <sup>d</sup>
65-74	64.3	66.2	57.0	65.3	66.9	59.3	52.5	58.2 <sup>d</sup>	35.7 <sup>d</sup>
75+	62.1	67.0	47.7	64.2	70.3	46.7 <sup>d</sup>	45.2 <sup>d</sup>	39.9 <sup>d</sup>	58.6 <sup>e</sup>
Under 65	65.8	66.5	63.1	68.3	69.0	65.4	53.6	54.1	52.5 <sup>d</sup>
65 and over	63.7	66.5	54.1	65.0	67.8	55.2	51.0	54.2	41.8 <sup>d</sup>

a

Rates are based on End Results data from a series of hospital registries and one population-based registry.

b

Rates are from the SEER 9 areas. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients into 2000.

c

The difference in rates between 1974-1976 and 1992-1999 is statistically significant (p&lt;.05).

d

The standard error of the survival rate is between 5 and 10 percentage points.

e

The standard error of the survival rate is greater than 10 percentage points.

-

Statistic could not be calculated.

Table XII-5  
 LARYNX CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Incidence																		
SEER <sup>a</sup>	5.2	5.3	5.4	5.0	5.2	5.2	5.0	5.1	4.7	5.0	4.4	4.7	4.4	4.3	4.2	3.8	4.1	4.0
Mortality																		
U.S. <sup>b</sup>	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.4
SEER <sup>a</sup>	1.6	1.5	1.5	1.4	1.4	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.2	1.2	1.2	1.2	1.3	1.3
Relative Survival Rates (SEER <sup>a</sup> )																		
1-year	88.5	89.1	90.6	89.5	88.1	86.8	89.3	87.6	90.6	88.2	87.4	87.6	89.6	88.7	86.4	86.8	86.2	
2-year	79.1	80.3	80.8	80.2	79.0	76.8	80.0	77.8	80.7	78.3	79.1	77.5	80.4	79.7	78.7	76.3		
3-year	73.3	74.8	75.6	73.2	73.9	72.2	74.3	71.2	74.0	73.9	72.3	70.5	75.4	75.1	73.1			
4-year	69.0	70.7	70.1	68.6	70.1	69.4	67.7	66.8	70.0	69.4	66.5	66.4	69.9	70.4				
5-year	65.9	67.5	68.0	65.5	67.7	67.0	63.9	65.0	67.6	66.1	62.6	63.5	66.4					
6-year	63.7	64.8	64.1	61.4	64.6	64.3	61.7	61.0	63.8	63.0	60.6	59.2						
7-year	61.5	62.2	61.7	58.9	61.1	62.6	59.5	59.4	63.2	60.4	58.3							
8-year	59.7	60.6	58.9	57.1	57.5	60.1	56.4	57.2	59.4	57.8								
9-year	57.5	58.5	56.2	54.5	55.3	57.3	54.1	55.4	57.2									
11-year	55.4	56.7	54.2	51.7	53.9	55.9	51.4	53.2										
10-year	54.1	54.5	52.9	50.2	51.2	52.6	50.1											
12-year	52.3	52.0	51.0	48.2	50.0	50.1												
13-year	51.3	49.9	50.8	46.5	48.7													
14-year	49.8	48.8	46.8	44.4														
15-year	47.7	47.2	45.8															
16-year	45.7	45.0																
17-year	43.6																	
18-year	42.7																	
19-year	41.2																	
20-year	39.3																	

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XII-6  
 LARYNX CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Incidence																		
SEER <sup>a</sup>	9.8	9.8	9.9	9.4	9.4	9.6	8.9	9.2	8.5	9.1	8.1	8.3	7.9	7.5	7.5	6.7	7.0	7.2
Mortality																		
U.S. <sup>b</sup>	3.4	3.2	3.0	3.1	3.1	3.0	3.0	3.0	3.1	3.0	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.6
SEER <sup>a</sup>	3.2	2.9	2.8	2.8	2.6	2.9	2.7	2.7	2.8	2.6	2.7	2.7	2.2	2.2	2.2	2.1	2.3	2.3
Relative Survival Rates (SEER <sup>a</sup> )																		
1-year	88.8	89.2	90.8	89.8	88.7	86.9	89.8	88.0	90.6	88.5	87.7	89.8	91.6	88.4	89.2	88.1	87.9	
2-year	79.3	80.5	81.6	80.2	80.0	76.0	81.0	78.5	81.2	79.2	79.8	79.7	82.1	79.9	81.6	77.5		
3-year	73.6	75.2	76.2	74.0	76.2	70.9	75.1	71.4	74.1	74.1	74.0	72.7	76.9	75.5	76.0			
4-year	69.4	71.3	70.7	69.2	72.2	68.8	69.4	67.5	70.3	70.0	68.4	68.2	72.0	71.0				
5-year	66.4	68.0	68.6	66.0	69.5	66.6	65.7	65.9	68.6	66.8	64.7	65.2	68.4					
6-year	64.2	65.3	64.9	61.9	66.9	63.9	62.8	61.8	64.6	63.7	62.8	61.4						
7-year	62.1	62.8	62.7	59.4	63.3	62.6	61.4	60.5	64.1	60.8	60.8							
8-year	60.2	61.3	60.6	57.5	59.8	60.2	58.4	58.6	60.3	58.9								
9-year	58.1	59.2	58.5	55.4	58.4	57.9	56.7	57.1	58.0									
11-year	56.2	57.7	57.0	52.2	57.1	57.4	54.0	55.1										
10-year	55.2	55.4	56.3	51.0	54.7	54.7	52.4											
12-year	53.8	52.9	54.6	49.7	53.8	52.9												
13-year	52.8	50.9	54.3	48.6	53.8													
14-year	51.3	49.7	50.3	46.8														
15-year	49.3	47.9	49.5															
16-year	47.3	46.0																
17-year	45.3																	
18-year	44.4																	
19-year	42.7																	
20-year	41.1																	

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XII-7  
 LARYNX CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Incidence																		
SEER <sup>a</sup>	1.6	1.7	1.9	1.6	1.9	1.9	2.0	1.9	1.8	1.8	1.5	1.8	1.6	1.7	1.6	1.6	1.8	1.4
Mortality																		
U.S. <sup>b</sup>	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5
SEER <sup>a</sup>	0.5	0.6	0.5	0.4	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5
Relative Survival Rates (SEER <sup>a</sup> )																		
1-year	86.8	88.6	89.7	88.3	85.6	86.1	87.4	86.0	90.5	87.3	85.8	78.8	81.5	89.6	76.7	83.0	80.5	
2-year	78.3	79.2	77.2	80.1	74.8	80.2	76.4	75.4	78.9	74.1	76.0	69.1	73.0	78.9	68.5	72.7		
3-year	71.4	72.8	73.0	69.7	64.7	77.7	71.6	70.7	73.4	72.7	65.0	62.0	68.9	73.8	62.8			
4-year	66.9	68.0	67.4	66.3	62.0	72.0	62.1	64.0	69.0	66.8	58.6	59.7	61.0	68.4				
5-year	63.6	65.1	65.5	63.5	60.4	68.7	58.0	62.0	63.8	63.3	54.2	57.2	58.4					
6-year	61.5	62.3	61.0	59.3	55.7	65.9	58.0	58.0	60.9	60.4	51.9	51.1						
7-year	58.6	59.9	57.6	57.1	52.7	63.0	53.3	55.1	60.0	58.7	48.5							
8-year	57.1	57.5	52.1	55.5	48.9	59.9	50.0	52.1	56.2	53.4								
9-year	54.6	55.6	47.1	50.8	44.1	55.3	45.8	49.5	54.3									
11-year	51.5	52.9	43.3	49.8	42.6	50.3	43.4	46.5										
10-year	49.0	50.5	40.1	47.2	38.8	45.0	42.9											
12-year	46.1	48.4	37.5	42.7	37.0	40.1												
13-year	44.5	46.2	37.5	38.8	31.0													
14-year	43.7	45.7	34.3	35.5														
15-year	41.1	44.8	33.0															
16-year	39.5	41.4																
17-year	37.1																	
18-year	36.7																	
19-year	35.8																	
20-year	33.1																	

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XII-8  
LARYNX CANCER (Invasive)

Percent Diagnosed With Cancer In 10, 20 and 30 Years and In Remaining Lifetime,  
 Given Cancer Free At Current Age By Race and Sex

Lifetime Risk (Percent) of Being Diagnosed (12 SEER Areas) With Cancer and  
 Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

1998-2000

All Races

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.16
10	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.17
20	0.00	0.00	0.03	0.66	0.00	0.00	0.01	0.17
30	0.00	0.03	0.14	0.67	0.00	0.01	0.04	0.17
40	0.03	0.14	0.36	0.68	0.01	0.04	0.09	0.17
50	0.11	0.34	0.56	0.67	0.03	0.08	0.13	0.16
60	0.25	0.48	0.58	0.60	0.06	0.11	0.13	0.14

Lifetime Risk of Being Diagnosed = 0.65%  
 Lifetime Risk of Dying = 0.24%

Lifetime Risk of Being Diagnosed = 0.16%  
 Lifetime Risk of Dying = 0.06%

Whites

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.17
10	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.17
20	0.00	0.00	0.03	0.66	0.00	0.00	0.01	0.17
30	0.00	0.03	0.13	0.67	0.00	0.01	0.04	0.17
40	0.03	0.13	0.36	0.68	0.01	0.04	0.09	0.17
50	0.11	0.34	0.56	0.67	0.03	0.08	0.14	0.16
60	0.25	0.48	0.58	0.60	0.06	0.12	0.14	0.14

Lifetime Risk of Being Diagnosed = 0.65%  
 Lifetime Risk of Dying = 0.22%

Lifetime Risk of Being Diagnosed = 0.17%  
 Lifetime Risk of Dying = 0.06%

Blacks

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.23
10	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.24
20	0.00	0.00	0.07	0.90	0.00	0.00	0.02	0.24
30	0.00	0.07	0.28	0.92	0.00	0.02	0.07	0.24
40	0.07	0.28	0.59	0.95	0.02	0.07	0.15	0.24
50	0.23	0.57	0.82	0.95	0.05	0.14	0.20	0.23
60	0.39	0.69	0.82	0.83	0.10	0.16	0.19	0.20

Lifetime Risk of Being Diagnosed = 0.86%  
 Lifetime Risk of Dying = 0.39%

Lifetime Risk of Being Diagnosed = 0.23%  
 Lifetime Risk of Dying = 0.09%



Table XII-9  
LARYNX CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES

By Race/Ethnicity and Sex

Incidence<sup>a</sup>

RACE/ETHNICITY	Rate 1996-2000			Trend 1992-2000		
	Rate per 100,000 persons			APC (%)		
	Total	Males	Females	Total	Males	Females
All Races	3.9	7.0	1.5	-2.6 <sup>d</sup>	-3.2 <sup>d</sup>	-1.0
White	3.9	6.9	1.5	-2.4 <sup>d</sup>	-3.1 <sup>d</sup>	-0.7
White Hispanic <sup>b</sup>	2.9	5.7	0.8	-1.3	-2.2 <sup>d</sup>	-
White Non-Hispanic <sup>b</sup>	3.9	6.8	1.6	-2.5 <sup>d</sup>	-3.1 <sup>d</sup>	-1.2
Black	6.5	12.0	2.6	-3.3 <sup>d</sup>	-3.4 <sup>d</sup>	-2.3
Asian/Pacific Islander	1.8	3.6	0.5	-1.7	-1.8	-
Amer Ind/Alaska Nat	-	-	-	-	-	-
Hispanic <sup>b</sup>	2.8	5.4	0.8	-1.0	-2.1 <sup>d</sup>	-

Mortality<sup>c</sup>

RACE/ETHNICITY	Rate 1996-2000			Trend 1992-2000		
	Rate per 100,000 persons			APC (%)		
	Total	Males	Females	Total	Males	Females
All Races	1.4	2.6	0.5	-2.0 <sup>d</sup>	-2.4 <sup>d</sup>	-1.4 <sup>d</sup>
White	1.3	2.4	0.5	-1.8 <sup>d</sup>	-2.3 <sup>d</sup>	-1.1
White Hispanic <sup>b</sup>	1.1	2.4	0.2	-1.0	-0.7	-
White Non-Hispanic <sup>b</sup>	1.3	2.4	0.5	-1.5 <sup>d</sup>	-2.1 <sup>d</sup>	-0.6
Black	2.9	5.7	0.9	-2.5 <sup>d</sup>	-2.5 <sup>d</sup>	-2.5 <sup>d</sup>
Asian/Pacific Islander	0.4	0.9	-	-3.2	-1.7	-
Amer Ind/Alaska Nat	1.1	2.0	-	-	-	-
Hispanic <sup>b</sup>	1.1	2.3	0.2	-1.1	-0.8	-

The APC is the Annual Percent Change over the time interval.

- Statistic not shown. Rate based on less than 25 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

<sup>a</sup> Incidence data are from the 12 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, and Alaska Native Registry).

<sup>b</sup> Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics do not include cases from Detroit, Hawaii and Alaska Native Registry. For mortality, information is included for all states except Connecticut, Oklahoma, New York, and New Hampshire.

<sup>c</sup> Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

<sup>d</sup> The APC is significantly different from zero (p<.05).

Table XII-10  
LARYNX CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE RATES<sup>a</sup> AND SEER DEATH RATES<sup>b</sup>  
 By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES<sup>a</sup>, 1996-2000</u>									
REGISTRY									
12 registries	3.9	7.0	1.5	3.9	6.9	1.5	6.5	12.0	2.6
11 registries	3.9	7.0	1.5	3.9	6.9	1.5	6.5	12.0	2.6
9 registries	4.1	7.2	1.6	4.0	7.1	1.6	6.7	12.1	2.8
San Francisco-Oakland	3.5	6.4	1.3	3.7	6.6	1.3	6.3	11.3	2.5
Connecticut	4.9	8.5	2.1	4.7	8.2	2.0	7.3	13.6	-
Metropolitan Detroit	5.4	9.4	2.4	5.0	8.6	2.1	7.6	13.6	3.3
Hawaii	3.4	6.2	0.9	5.4	9.3	-	-	-	-
Iowa	4.5	7.7	1.8	4.5	7.7	1.8	-	-	-
New Mexico	3.6	6.1	1.5	3.8	6.4	1.5	-	-	-
Seattle-Puget Sound	3.5	6.1	1.4	3.5	6.2	1.3	6.1	-	-
Utah	2.0	3.5	0.8	2.0	3.5	0.9	-	-	-
Metropolitan Atlanta	4.3	8.0	1.5	3.9	7.2	1.3	5.6	11.1	2.2
San Jose-Monterey	2.9	5.2	1.1	3.1	5.6	1.2	-	-	-
Los Angeles	3.6	6.7	1.3	3.7	6.6	1.4	6.1	12.0	2.1
<u>SEER DEATH RATES<sup>b</sup>, 1996-2000</u>									
REGISTRY									
12 registries	1.2	2.2	0.5	1.2	2.1	0.5	2.6	5.2	0.8
11 registries	1.2	2.2	0.5	1.2	2.1	0.5	2.6	5.2	0.8
9 registries	1.2	2.2	0.5	1.2	2.1	0.5	2.6	5.0	0.8
San Francisco-Oakland	1.1	1.9	0.5	1.1	1.8	0.5	2.3	4.1	-
Connecticut	1.4	2.4	0.7	1.2	2.3	0.6	3.3	-	-
Metropolitan Detroit	1.8	3.3	0.7	1.5	2.7	0.7	2.9	5.9	-
Hawaii	0.6	1.3	-	-	-	-	-	-	-
Iowa	1.3	2.3	0.5	1.3	2.3	0.5	-	-	-
New Mexico	1.1	2.0	-	1.2	2.0	-	-	-	-
Seattle-Puget Sound	1.1	2.0	0.5	1.1	1.9	0.5	-	-	-
Utah	0.6	1.0	-	0.6	0.9	-	-	-	-
Metropolitan Atlanta	1.3	2.7	-	1.0	2.0	-	2.3	5.1	-
San Jose-Monterey	0.8	1.5	-	0.9	1.7	-	-	-	-
Los Angeles	1.3	2.4	0.5	1.3	2.2	0.5	2.7	5.6	-

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.

<sup>a</sup> SEER 9 areas. Incidence rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> NCHS public use data file. Death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

- Statistic could not be calculated or populations are inadequate.

Table XII-11  
LARYNX CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	1.4	0.01							
High Five States									
District of Columbia	3.8 <sup>bc</sup>	0.37	(01)	171.4					
Louisiana	2.0 <sup>bc</sup>	0.10	(02)	42.9					
Rhode Island	2.0 <sup>b</sup>	0.19	(03)	42.9					
Kentucky	1.9 <sup>bc</sup>	0.10	(04)	35.7					
West Virginia	1.9 <sup>b</sup>	0.13	(05)	35.7					
Low Five States									
Oregon	1.0 <sup>bc</sup>	0.08	(47)	-28.6					
Nebraska	0.9 <sup>bc</sup>	0.10	(48)	-35.7					
Montana	0.9 <sup>bc</sup>	0.14	(49)	-35.7					
Hawaii	0.6 <sup>bc</sup>	0.11	(50)	-57.1					
Utah	0.6 <sup>bc</sup>	0.09	(51)	-57.1					
Alabama	1.4	0.08	(27)	0.0	Montana	0.9 <sup>bc</sup>	0.14	(49)	-35.7
Alaska	1.2	0.31	(39)	-14.3	Nebraska	0.9 <sup>bc</sup>	0.10	(48)	-35.7
Arizona	1.1 <sup>bc</sup>	0.07	(42)	-21.4	Nevada	1.6	0.14	(09)	14.3
Arkansas	1.2	0.09	(38)	-14.3	New Hampshire	1.4	0.15	(31)	0.0
California	1.1 <sup>bc</sup>	0.03	(43)	-21.4	New Jersey	1.5	0.06	(21)	7.1
Colorado	1.0 <sup>bc</sup>	0.08	(44)	-28.6	New Mexico	1.1 <sup>b</sup>	0.12	(40)	-21.4
Connecticut	1.4	0.09	(30)	0.0	New York	1.6 <sup>c</sup>	0.04	(08)	14.3
Delaware	1.5	0.19	(23)	7.1	North Carolina	1.5	0.06	(17)	7.1
District of Columbia	3.8 <sup>bc</sup>	0.37	(01)	171.4	North Dakota	1.6	0.21	(14)	14.3
Florida	1.6 <sup>c</sup>	0.04	(11)	14.3	Ohio	1.6	0.05	(15)	14.3
Georgia	1.5	0.07	(22)	7.1	Oklahoma	1.3	0.09	(32)	-7.1
Hawaii	0.6 <sup>bc</sup>	0.11	(50)	-57.1	Oregon	1.0 <sup>bc</sup>	0.08	(47)	-28.6
Idaho	1.0 <sup>b</sup>	0.13	(45)	-28.6	Pennsylvania	1.4	0.05	(25)	0.0
Illinois	1.6	0.05	(13)	14.3	Rhode Island	2.0 <sup>b</sup>	0.19	(03)	42.9
Indiana	1.2	0.06	(37)	-14.3	South Carolina	1.6	0.09	(12)	14.3
Iowa	1.3	0.09	(34)	-7.1	South Dakota	1.3	0.18	(33)	-7.1
Kansas	1.2	0.10	(35)	-14.3	Tennessee	1.7 <sup>bc</sup>	0.08	(07)	21.4
Kentucky	1.9 <sup>bc</sup>	0.10	(04)	35.7	Texas	1.5	0.04	(19)	7.1
Louisiana	2.0 <sup>bc</sup>	0.10	(02)	42.9	Utah	0.6 <sup>bc</sup>	0.09	(51)	-57.1
Maine	1.5	0.15	(16)	7.1	Vermont	1.4	0.22	(28)	0.0
Maryland	1.8 <sup>bc</sup>	0.09	(06)	28.6	Virginia	1.6	0.07	(10)	14.3
Massachusetts	1.5	0.07	(18)	7.1	Washington	1.1 <sup>bc</sup>	0.07	(41)	-21.4
Michigan	1.5	0.06	(20)	7.1	West Virginia	1.9 <sup>b</sup>	0.13	(05)	35.7
Minnesota	1.0 <sup>bc</sup>	0.07	(46)	-28.6	Wisconsin	1.2	0.07	(36)	-14.3
Mississippi	1.5	0.10	(24)	7.1	Wyoming	1.4	0.25	(26)	0.0
Missouri	1.4	0.07	(29)	0.0					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

<sup>c</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

Table XII-12  
LARYNX CANCER (Invasive)AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

## All Races, Males

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	2.6	0.02							
High Five States									
District of Columbia	7.2 <sup>bc</sup>	0.79	(01)	176.9					
Rhode Island	3.8 <sup>b</sup>	0.41	(02)	46.2					
Louisiana	3.7 <sup>bc</sup>	0.21	(03)	42.3					
Kentucky	3.5 <sup>bc</sup>	0.21	(04)	34.6					
Tennessee	3.3 <sup>bc</sup>	0.17	(05)	26.9					
Low Five States									
Nebraska	1.7 <sup>bc</sup>	0.21	(47)	-34.6					
Idaho	1.7 <sup>bc</sup>	0.25	(48)	-34.6					
Montana	1.5 <sup>bc</sup>	0.27	(49)	-42.3					
Hawaii	1.3 <sup>bc</sup>	0.22	(50)	-50.0					
Utah	1.0 <sup>bc</sup>	0.18	(51)	-61.5					
Alabama	3.0 <sup>b</sup>	0.18	(12)	15.4	Montana	1.5 <sup>bc</sup>	0.27	(49)	-42.3
Alaska	2.3	0.68	(34)	-11.5	Nebraska	1.7 <sup>bc</sup>	0.21	(47)	-34.6
Arizona	1.9 <sup>bc</sup>	0.14	(44)	-26.9	Nevada	2.5	0.27	(28)	-3.8
Arkansas	2.2 <sup>b</sup>	0.19	(38)	-15.4	New Hampshire	2.5	0.33	(29)	-3.8
California	2.0 <sup>bc</sup>	0.06	(41)	-23.1	New Jersey	2.8	0.13	(20)	7.7
Colorado	1.8 <sup>bc</sup>	0.16	(46)	-30.8	New Mexico	2.0 <sup>b</sup>	0.24	(40)	-23.1
Connecticut	2.4	0.18	(30)	-7.7	New York	3.0 <sup>bc</sup>	0.09	(09)	15.4
Delaware	2.6	0.40	(25)	0.0	North Carolina	3.0 <sup>b</sup>	0.14	(11)	15.4
District of Columbia	7.2 <sup>bc</sup>	0.79	(01)	176.9	North Dakota	2.7	0.42	(23)	3.8
Florida	2.9	0.08	(14)	11.5	Ohio	2.8	0.11	(19)	7.7
Georgia	2.8	0.15	(18)	7.7	Oklahoma	2.4	0.18	(31)	-7.7
Hawaii	1.3 <sup>bc</sup>	0.22	(50)	-50.0	Oregon	1.8 <sup>bc</sup>	0.16	(45)	-30.8
Idaho	1.7 <sup>bc</sup>	0.25	(48)	-34.6	Pennsylvania	2.7	0.10	(22)	3.8
Illinois	2.9	0.11	(13)	11.5	Rhode Island	3.8 <sup>b</sup>	0.41	(02)	46.2
Indiana	2.3	0.14	(37)	-11.5	South Carolina	3.0 <sup>b</sup>	0.20	(10)	15.4
Iowa	2.3	0.18	(35)	-11.5	South Dakota	2.3	0.37	(33)	-11.5
Kansas	2.2 <sup>b</sup>	0.19	(39)	-15.4	Tennessee	3.3 <sup>bc</sup>	0.17	(05)	26.9
Kentucky	3.5 <sup>bc</sup>	0.21	(04)	34.6	Texas	2.9	0.09	(16)	11.5
Louisiana	3.7 <sup>bc</sup>	0.21	(03)	42.3	Utah	1.0 <sup>bc</sup>	0.18	(51)	-61.5
Maine	2.6	0.29	(26)	0.0	Vermont	2.5	0.44	(27)	-3.8
Maryland	3.3 <sup>b</sup>	0.18	(07)	26.9	Virginia	3.0 <sup>b</sup>	0.16	(08)	15.4
Massachusetts	2.9	0.15	(15)	11.5	Washington	1.9 <sup>bc</sup>	0.13	(43)	-26.9
Michigan	2.7	0.12	(21)	3.8	West Virginia	3.3 <sup>b</sup>	0.27	(06)	26.9
Minnesota	1.9 <sup>bc</sup>	0.14	(42)	-26.9	Wisconsin	2.3	0.14	(36)	-11.5
Mississippi	2.8	0.23	(17)	7.7	Wyoming	2.4	0.49	(32)	-7.7
Missouri	2.7	0.15	(24)	3.8					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

<sup>c</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

Table XII-13  
LARYNX CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

All Races, Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	0.5	0.01							
High Five States									
District of Columbia	1.3 <sup>b</sup>	0.28	(01)	160.0					
Nevada	0.9 <sup>b</sup>	0.14	(02)	80.0					
Kentucky	0.8 <sup>b</sup>	0.08	(03)	60.0					
West Virginia	0.8 <sup>b</sup>	0.11	(04)	60.0					
Wyoming	0.7 <sup>b</sup>	0.24	(05)	40.0					
Low Five States									
Alaska	0.3 <sup>b</sup>	0.23	(47)	-40.0					
Minnesota	0.3 <sup>bc</sup>	0.05	(48)	-40.0					
Nebraska	0.3 <sup>b</sup>	0.08	(49)	-40.0					
Utah	0.2 <sup>bc</sup>	0.08	(50)	-60.0					
Hawaii	0.0 <sup>bc</sup>	0.03	(51)	-100.0					
Alabama	0.4 <sup>b</sup>	0.05	(45)	-20.0	Montana	0.4 <sup>b</sup>	0.12	(44)	-20.0
Alaska	0.3 <sup>b</sup>	0.23	(47)	-40.0	Nebraska	0.3 <sup>b</sup>	0.08	(49)	-40.0
Arizona	0.5	0.06	(39)	0.0	Nevada	0.9 <sup>b</sup>	0.14	(02)	80.0
Arkansas	0.5	0.08	(27)	0.0	New Hampshire	0.6 <sup>b</sup>	0.13	(23)	20.0
California	0.5	0.02	(42)	0.0	New Jersey	0.6 <sup>b</sup>	0.05	(22)	20.0
Colorado	0.5	0.07	(32)	0.0	New Mexico	0.5	0.11	(30)	0.0
Connecticut	0.7 <sup>b</sup>	0.08	(11)	40.0	New York	0.6 <sup>b</sup>	0.03	(13)	20.0
Delaware	0.6 <sup>b</sup>	0.17	(16)	20.0	North Carolina	0.5	0.05	(37)	0.0
District of Columbia	1.3 <sup>b</sup>	0.28	(01)	160.0	North Dakota	0.6 <sup>b</sup>	0.19	(12)	20.0
Florida	0.6 <sup>b</sup>	0.03	(19)	20.0	Ohio	0.7 <sup>b</sup>	0.05	(10)	40.0
Georgia	0.5	0.05	(33)	0.0	Oklahoma	0.5	0.07	(28)	0.0
Hawaii	0.0 <sup>bc</sup>	0.03	(51)	-100.0	Oregon	0.3 <sup>b</sup>	0.06	(46)	-40.0
Idaho	0.4 <sup>b</sup>	0.12	(43)	-20.0	Pennsylvania	0.6 <sup>b</sup>	0.04	(21)	20.0
Illinois	0.6 <sup>b</sup>	0.04	(14)	20.0	Rhode Island	0.7 <sup>b</sup>	0.14	(09)	40.0
Indiana	0.5	0.05	(34)	0.0	South Carolina	0.6 <sup>b</sup>	0.07	(15)	20.0
Iowa	0.5	0.08	(29)	0.0	South Dakota	0.5	0.15	(40)	0.0
Kansas	0.5	0.08	(25)	0.0	Tennessee	0.6 <sup>b</sup>	0.06	(18)	20.0
Kentucky	0.8 <sup>b</sup>	0.08	(03)	60.0	Texas	0.5	0.03	(38)	0.0
Louisiana	0.7 <sup>b</sup>	0.08	(06)	40.0	Utah	0.2 <sup>bc</sup>	0.08	(50)	-60.0
Maine	0.7 <sup>b</sup>	0.14	(07)	40.0	Vermont	0.5	0.18	(26)	0.0
Maryland	0.7 <sup>b</sup>	0.07	(08)	40.0	Virginia	0.6 <sup>b</sup>	0.06	(17)	20.0
Massachusetts	0.5	0.05	(24)	0.0	Washington	0.5	0.06	(35)	0.0
Michigan	0.6 <sup>b</sup>	0.05	(20)	20.0	West Virginia	0.8 <sup>b</sup>	0.11	(04)	60.0
Minnesota	0.3 <sup>bc</sup>	0.05	(48)	-40.0	Wisconsin	0.5	0.06	(36)	0.0
Mississippi	0.5	0.08	(41)	0.0	Wyoming	0.7 <sup>b</sup>	0.24	(05)	40.0
Missouri	0.5	0.06	(31)	0.0					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

<sup>c</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

Table XII-14  
LARYNX CANCER (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2000  
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis	0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	0 to <10	0 to <25	>=25 <sup>f</sup>	Complete <sup>g</sup>
<u>Race/Sex</u>									
All Races <sup>b</sup>	34,446	23,797	16,659	11,280	6,620	58,243	92,802	6,029	98,831
Males	27,153	19,083	13,632	9,018	5,410	46,236	74,296	4,885 <sup>h</sup>	79,181
Females	7,293	4,714	3,027	2,262	1,210	12,007	18,506	1,144 <sup>h</sup>	19,650
White <sup>b</sup>	28,877	20,640	14,610	10,126	6,016	49,517	80,269	5,109	85,378
Males	23,010	16,507	12,088	8,090	4,908	39,517	64,603	4,300 <sup>h</sup>	68,903
Females	5,867	4,133	2,522	2,036	1,108	10,000	15,666	809 <sup>h</sup>	16,475
Black <sup>b</sup>	4,795	2,712	1,756	1,009	531	7,507	10,803	+	+
Males	3,530	2,206	1,364	806	436	5,736	8,342	+	+
Females	1,265	506	392	-	-	1,771	2,461	+	+
Asian/Pacific Islander <sup>c</sup>	484	211	+	+	+	695	+	+	+
Males	400	182	+	+	+	582	+	+	+
Females	84	-	+	+	+	113	+	+	+
Hispanic <sup>d</sup>	1,272	864	+	+	+	2,136	+	+	+
Males	1,095	720	+	+	+	1,815	+	+	+
Females	177	144	+	+	+	321	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2000, of the SEER 11 population diagnosed in the previous 10 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)										Age-Adjusted <sup>e</sup>
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race/Sex</u>											
All Races <sup>c</sup>	0.0176%	-	-	-	0.0010%	0.0072%	0.0314%	0.0862%	0.1043%	0.0710%	0.0196%
Males	0.0284%	-	-	-	0.0011%	0.0108%	0.0530%	0.1470%	0.1979%	0.1627%	0.0356%
Females	0.0070%	-	-	-	0.0009%	0.0037%	0.0109%	0.0324%	0.0346%	0.0233%	0.0071%
White <sup>c</sup>	0.0188%	-	-	-	0.0011%	0.0072%	0.0313%	0.0897%	0.1062%	0.0713%	0.0200%
Males	0.0303%	-	-	-	0.0011%	0.0104%	0.0530%	0.1521%	0.2006%	0.1646%	0.0361%
Females	0.0074%	-	-	-	-	0.0040%	0.0101%	0.0332%	0.0352%	0.0236%	0.0072%
Black <sup>c</sup>	0.0195%	-	-	-	-	0.0130%	0.0553%	0.1252%	0.1405%	0.0842%	0.0287%
Males	0.0314%	-	-	-	-	0.0226%	0.0920%	0.2156%	0.2753%	0.2004%	0.0527%
Females	0.0088%	-	-	-	-	-	0.0245%	0.0536%	0.0515%	-	0.0117%
Asian/Pacific Islander <sup>c</sup>	0.0075%	-	-	-	-	-	0.0104%	0.0304%	0.0634%	0.0563%	0.0094%
Males	0.0131%	-	-	-	-	-	0.0178%	0.0543%	0.1275%	0.1199%	0.0182%
Females	0.0023%	-	-	-	-	-	-	-	-	-	0.0026%
Hispanic <sup>d</sup>	0.0058%	-	-	-	-	0.0035%	0.0178%	0.0590%	0.0703%	0.0571%	0.0131%
Males	0.0097%	-	-	-	-	-	0.0343%	0.1117%	0.1430%	0.1481%	0.0265%
Females	0.0018%	-	-	-	-	-	-	-	-	-	0.0033%

<sup>a</sup> US 2000 cancer prevalence counts are based on 2000 cancer prevalence proportions from the SEER registries and 1/1/2000 US population estimates based on the average of 1999 and 2000 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

<sup>b c d</sup> Statistics based on b) SEER 9 Areas c) SEER 11 Areas d) SEER 11 Areas excluding Hawaii and Detroit.

<sup>e</sup> Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.

<sup>f g h</sup> (f) Cases diagnosed 25 years or more ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (g) Complete prevalence is obtained by summing 0 to <25 with >=25. (h) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistics not shown. Rate based on less than 25 cases estimated alive for the time interval.

+ Not available.

## SEER Incidence and US Death Rates+ Larynx Cancer, by Race and Sex

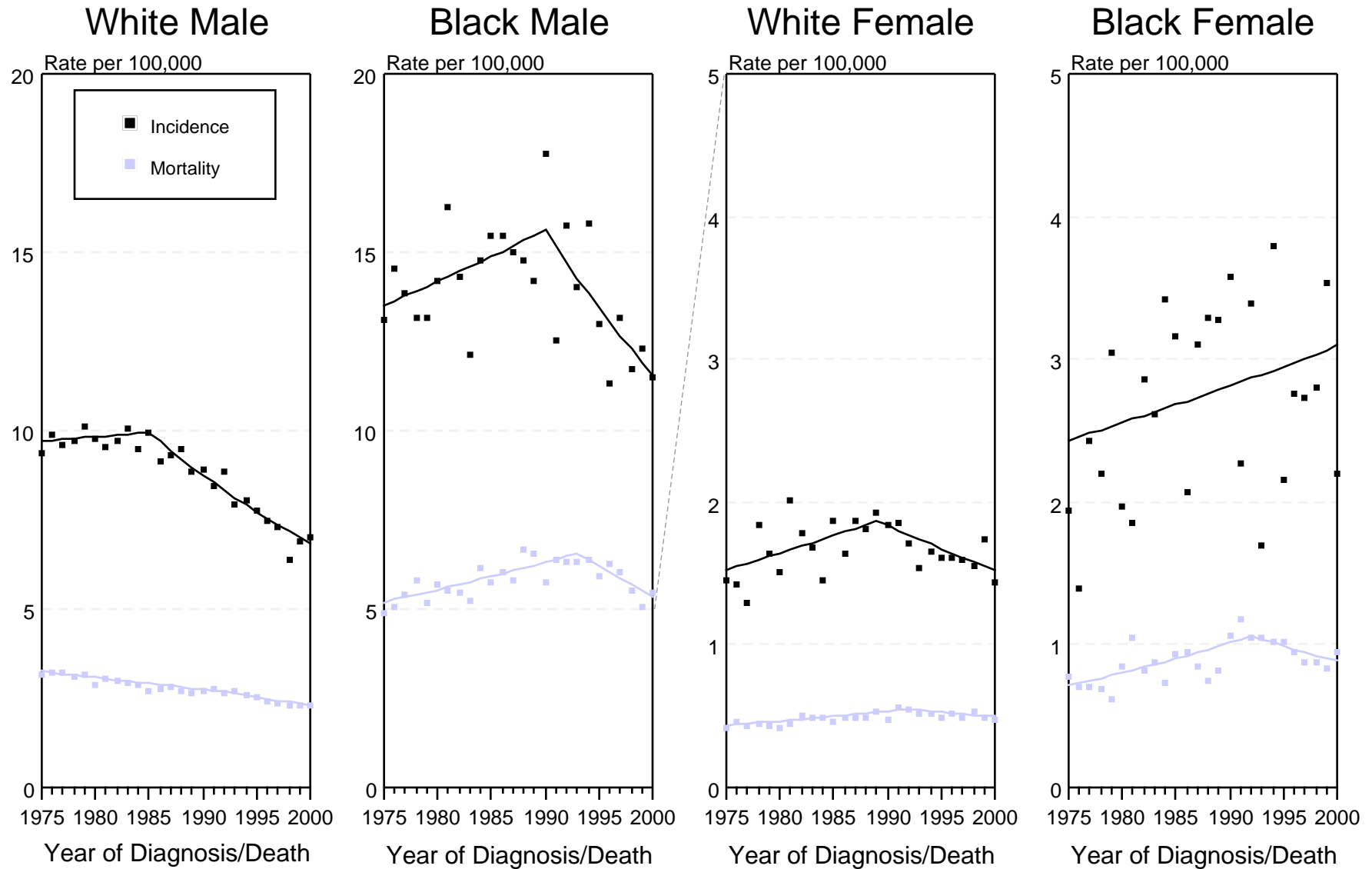


Figure XII-1

+ Source: SEER 9 areas and NCHS public use data file. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program.